

porphyrin-containing molecule such as but not limited to hemoglobin or a precursor form thereof or part thereof such as heme and wherein said HA2 domain comprises:

- (i) an amino acid sequence substantially encoded by the nucleotide sequence set forth in ~~<400>5~~ SEQ ID NO:5 or a nucleotide sequence having at least about 40% similarity thereto or capable of hybridizing thereto under low stringency conditions; and/or
- (ii) an amino acid sequence substantially as set forth in ~~<400>6~~ SEQ ID NO:6 or an amino acid sequence having at least about 40% similarity thereto or at least about 20% identity after optimum alignment with the same sequence;

wherein said amino acid sequence is capable of interacting with an HA2-binding motif on a porphyrin-containing molecule such as but not limited to hemoglobin or a precursor form thereof or part thereof such as heme.

KWP 8-27-17 Please amend the paragraph on page 21 starting at line 1 and continuing on page 22 through line ⁶~~5~~ as follows:

Accordingly, another aspect of the present invention provides a method for the prophylaxis or treatment of infection by a microorganism in a mammal, said microorganism substantially requiring exogenous iron, heme or porphyrin for growth or maintenance wherein said method comprises administering to said mammal an effective amount of an agent for a time and under conditions sufficient to antagonize the interaction between a molecule derived from said microorganism and having an HA2 domain and an HA2-binding moiety on a porphyrin-containing molecule such as but not limited to hemoglobin or a precursor form thereof or part thereof such as heme and wherein said HA2 domain comprises:

- (i) an amino acid sequence substantially encoded by the nucleotide sequence set forth in ~~<400>5~~ SEQ ID NO:5 or a nucleotide sequence having at least about 40% similarity thereto or capable of hybridizing thereto under low stringency conditions; and/or